



- Dolby Digital, Dolby Digital EX, ProLogic II, DTS, DTS ES, DTS NEO:6, Matrix 7.1, THX EX 5.1/6.1/7.1 Decoding, Stereo Enhanced Stereo Surround Mode
- THX Ultra 2 certified
- Latest Generation Motorola DSP Processor
- NAD's Proprietary EARS Surround Music Mode
- 24 bit/96kHz Compatible
- 24 bit Resolution DACs for all channels
- 10 Inputs: 6 Video (3 are full in/out), 4 Audio (1 is Tape Monitor In/Out loop)
- All Video Inputs are S-Video and Composite
- Component Video Input
- 6 Digital Inputs: 1 BNC, 3 Coaxial, 2 Optical; freely assignable to any input
- 2 Digital Outputs: 1 Coaxial, 1 Optical
- Ext 5.1 Input for connection of DVD-A
- Multi-Source 2nd Zone Stereo Output
- 3 x 12V Trigger Outputs
- IEC Detachable Power Cable
- NAD Link
- RS-232 Port for advanced control systems and software upgrade
- HTR-2 - 8 Device Illuminated Learning Remote with Macro function
- ZR-2 Second Zone Remote

The S 170i is squarely focused on the individual who prizes sonic performance above all else, and appreciates the simplicity of the NAD approach. While you can find less expensive processors, and processors with a longer punch list of "features", the S 170i offers a level of performance for money that is unmatched. Whether used as an analogue preamp in Stereo Bypass mode, or used to decode the latest formats from Dolby, DTS, and THX, the S 170i brings a purity and dynamic realism to every performance. This goes beyond specs or features and speaks to the real reason for spending this much money on a Hi-Fi: to create an experience that transports the listener/viewer to that special place created by the recording artist. Indeed, it is this ability to "make the machine disappear" that separates the great products from the merely good products. The S 170i is a great product.

Features

The original S 170 was the first THX EX processor to reach the market nearly two years ago, and it still remains the benchmark for sonic performance in this price category. With the development of THX Ultra 2, DTS ES and Neo:6, and Dolby EX and ProLogic II it is logical that NAD would update the S 170 to include these new decoding formats. We are pleased to introduce the S 170i, offering all the latest decoding formats while maintaining the same elegant simplicity, style, and performance of the original.

Significantly, in these days of rapid digital format changes, the S 170i features a fully upgradeable digital processor on a separate plug-in circuit board. In fact owners of the S170 can have their unit upgraded to the "i" version for a fraction of the cost of purchasing a new unit, proving the value of this design concept. All DSP processing and operating system "intelligence" is located on a plug-in module, making major upgrades a fairly simple process. Minor upgrades are offered free of charge and can be implemented via download from a PC using the RS-232 port located on the rear panel.

The modular processor dictates the use of a specially engineered, ultra-low-noise switch mode power supply, so that the S 170i achieves supply voltages of unexcelled stability and purity that remain totally independent despite varying demands on all eight channels, or even the requirements of future digital upgrades.

The bass management circuit of the S 170i offers tremendous flexibility, while still meeting all the Dolby and THX mandates for bass redirection and Low Frequency Effects (LFE) channel management. The crossover frequency can be adjusted in 10Hz increments from 40Hz to 200Hz (except in THX mode where 80Hz is specified), and individual channels can have their level tweaked in 0.5dB increments allowing much finer adjustment than that offered by most receivers and processors. Uniquely, the S 170i uses both digital and analogue filter sections for a superior electronic crossover characteristic.

Despite its deceptively simple appearance, the S 170i is also fully equipped to serve as a very able master

component. Six digital inputs, including a pro-type BNC connection, plus three RCA jack coaxial and two optical ports are freely assignable, while two digital outputs facilitate recording. Following NAD's usual attention to detail, all digital inputs and outputs are buffered and transformer coupled to provide a precise impedance match to minimize "jitter" on the digital signal. There's also a 5.1- channel analogue input to accept the future addition of an outboard surround processor, such as DVD-Audio and/or an SACD component. Four analogue inputs, and no fewer than six video paths (all with S-Video) include a component-video input/output for fully integrated DVD or digital-TV use. A fully independent Zone 2 stereo output accommodates whole-house expansion, while an RS-232 serial port and three 12V trigger outputs (assignable for two functions) provide for sophisticated systems control. Of course, the S 170i also incorporates NAD Link for multi-component "smart-remote" operation.

NAD's HTR-2 multi-device learning remote control, with its ergonomic layout and illuminated keypad, makes remote operation enjoyable and straightforward. With direct access to Surround, Center, and Sub channel levels, it is easy to make small "tweaks" to the sound field "on the fly" without having to enter OSD menus - a nice feature for the serious movie buff. Another nice feature are the AV Presets; five non-volatile memory positions that can store alternate speaker level settings for instant recall. A separate ZR-2 remote is included for fully independent control of all second zone functions.

Performance

The S 170i's analogue audio circuits employ the latest high-performance FET operational amplifiers, and all eight channels deliver exceedingly low output impedance-long an NAD hallmark that eliminates the sonic impact of cable (and amplifier input) impedance. S 170i output muting is performed via reliable, sonically transparent gold-contact relays (rather than sound-coloring electronic switching), and includes gold-surfaced connectors throughout.

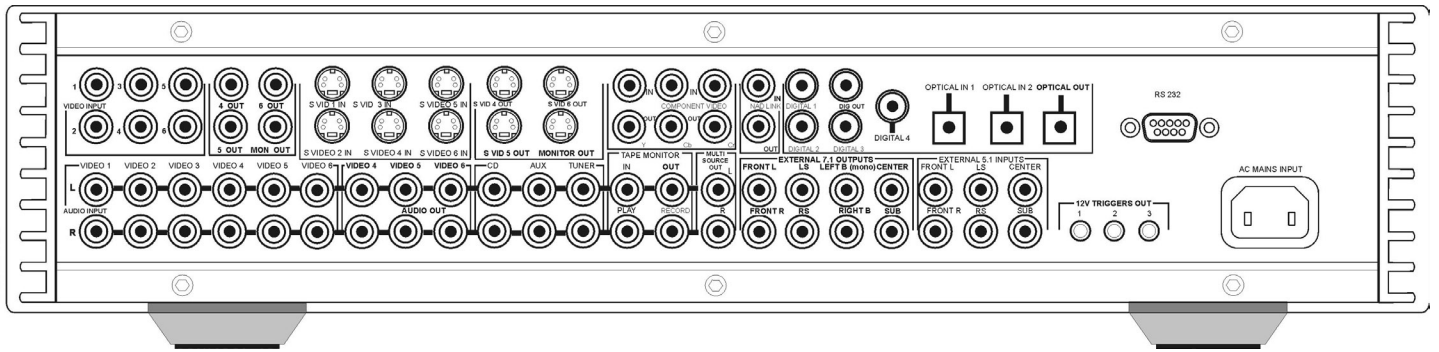
The result is a surround controller that stands as the sonic equal of the very best stereo high-end preamps, while also being capable of delivering the power and realism of the best multi-channel recordings. The S 170i's superb performance has earned it Lucas Film approval under the THX Ultra 2 program, a clear certification of no-holds-barred Home Theatre performance.

The S 170i combines ultra-high-speed DSP processing employing the latest generation Motorola DSP with 24 bit/96kHz capable D/A converters for all channels, yielding state-of-the-art surround decoding and sound quality in all modes. All digital circuits are run from a single high precision master clock to insure that no timing errors can occur between the various digital circuits that comprise this sophisticated control center. In addition to its superb Dolby Digital EX, DTS ES, THX Surround EX decoding, the S 170i performs extremely accurate digital-domain ProLogic II decoding. It includes NAD's proprietary Enhanced Ambience Recovery System

(EARS). Unlike typical ambience synthesis modes, EARS employs the S 170i's enormous DSP calculating power to extract the ambient content that is "encrypted" in virtually all natural-acoustic stereo recordings to the appropriate main, center and surround speakers-without resorting to artificially generated reflections or regeneration. EARS's natural ambience yields a subtle but extraordinarily effective surround mode that naturally enhances the spatial presentation in a fashion suitable for serious music listening.

When combined with associated components of similar caliber, like our S 570 DVD Player, S 400 FM Tuner and S 250 Power Amplifier, the S 170i is fully capable of extracting every nuance of musical and cinematic detail from your favourite performances.

And it's simple set-up and operation makes attainment of this home entertainment nirvana easy, enhancing the enjoyment of this fine electronic instrument.



Decoding formats	Dolby Digital, Dolby Digital EX, ProLogic II, DTS, DTS ES, DTS NEO:6, Matrix 7.1, THX EX 5.1/6.1/7.1 Decoding, Stereo Enhanced Stereo Surround Mode
Sampling Rates	32kHz, 44.1kHz, 48kHz, 96kHz
Modes	EARS Stereo (analogue bypass)
Analogue performance	
Analogue input impedance	16kΩ / 100pF
Analogue frequency response	20Hz - 20kHz +/- 0.2dB
Maximum input level	3V rms
THD+N	0.005%
Signal/noise ratio	>98dB
Dynamic Range	-95dB
Analogue channel separation	>95dB
Crosstalk	>90dB
Maximum output level	6V rms
Output impedance	Main pre-out 56Ω Tape out 470Ω Multi-room output 470Ω
Tone Controls	Bass (@20Hz) +/- 12dB Treble (@20kHz) +/- 12dB Centre (@ 3kHz) +/- 6dB
Digital input performance	
THD+N (Bandwidth 10Hz - 20kHz)	0.005%
Physical Specifications	
Dimensions (W x H x D)	17 3/4 x 3 7/8 x 11 1/4" (450 x 97 x 285mm)
Net Weight	11 lbs (4.99kg)
Shipping Weight	12.99 lbs (5.89kg)



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